

4121-126

AMENDMENTSRECEIVED
CENTRAL FAX CENTER

NOV 09 2006

IN THE CLAIMS:

Claim 1 has been amended by the present Amendment.

Complete Listing of the Claims

Upon entry of the present amendment, the claims will stand as follows. The following listing of the claims will replace all prior versions and listings of the claims in the present application:

1. (Currently amended) A method of preparing and selecting monoclonal antibodies for a specific antigen, the method comprising:
preparing a coding vector comprising a nucleotide sequence encoding an antibody binding protein, wherein the antibody binding protein binds an antibody and presents it on the cell surface of a hybridoma cell;
inserting the coding vector in a myeloma cell;
culturing the myeloma cell for expression of the antibody binding protein on the myeloma cell;
selecting active myeloma cells that express the antibody binding protein;
fusing B lymphocytes with the active myeloma cells to form hybridoma cells, wherein the B lymphocytes ~~generate~~ express an anti-specific antigen antibody in response to exposure to the specific antigen;
culturing the hybridoma cells under suitable conditions for ~~expressing~~ expression of anti-specific antigen antibodies, wherein the expressed antibodies are presented as connected bound to antibody binding proteins on the surface of the hybridoma cell;
detecting the ~~expressing~~ hybridoma cells containing presented antibodies by a labeled specific antigen that binds to the ~~expressed~~ presented antibody; and
selecting a hybridoma cell ~~expressing~~ presenting the monoclonal antibody.
2. (Previously presented) The method according to claim 1, wherein the antibody binding protein comprises a signal peptide, an antibody binding site independent of the anti-antigen antibody specificity and a membrane anchor.
3. (Previously presented) The method according to claim 2, wherein the antibody binding protein comprises an Fc binding protein or portions thereof.

4121-126

4. (Previously presented) The method according to claim 2, wherein the antibody binding protein comprises a combination of Fc binding proteins or portions thereof.
5. (Previously presented) The method according to claim 4, wherein the Fc binding protein is selected from the group consisting of CD16, CD32 and CD64.
6. (Previously presented) The method according to claim 2, wherein the antibody binding protein comprises an antibody binding domain of proteins selected from the group consisting of A, G, L and LG.
7. (Previously presented) The method according to claim 2, wherein the antibody binding protein comprises a combination of a signal peptide selected from the group consisting of a signal peptide of a mouse Ig kappa chain, and a signal peptide of a mouse MHC-class I k(k) molecule; an antibody binding site of a protein selected from the group consisting of protein A, G, L, and LG; and a transmembrane domain selected from the group consisting of PDGFR and CD52.
8. (Previously presented) The method according to claim 7, wherein the antibody binding protein is selected from the group consisting of SEQ ID NO: 2, SEQ ID NO: 4 and SEQ ID NO: 6.
9. (Previously presented) The method according to claim 1, wherein the hybridoma cells (over)express Rag1 and/or Rag2.
10. (Previously amended) The method according to claim 1, wherein the specific antigen originate from an antigen library.
11. (Previously presented) The method according to claim 1, wherein the specific antigens are bound to a carrier.

4121-126

12. (Previously presented) The method according to claim 11, wherein the carrier comprises magnetobeads.
13. (Previously presented) The method according to claim 7, wherein the specific antigens comprise a fluorescence or biotin labeling.
14. (Previously presented) The method according to claim 13, wherein the fluorescence labeling comprises FITC, TRITC, Cy3, Cy5, Cy5.5, Cy7 or phycoerythrin.
- 15.-20. (Cancelled)
21. (Previously presented) A method of preparing and selecting monoclonal antibodies for a specific antigen, the method comprising:
 - a) preparing an expression vector comprising a nucleotide sequence encoding an antibody binding protein, wherein the antibody binding protein comprises a combination of the signal peptide selected from the group consisting of a mouse Ig kappa chain and a mouse MHC-class I k(k) molecule, an antibody binding site of proteins selected from the group consisting of A, G, L and LG and a transmembrane domain selected from the group consisting of PDGFR and CD52.
 - b) inserting the expression vector in a myeloma cell;
 - c) culturing the myeloma cell for expression of the antibody binding protein on the myeloma cell;
 - d) selecting active myeloma cells that express the antibody binding protein;
 - e) immunizing a animal with the specific antigen and isolating spleen material from the animal that generates antibodies against the specific antigen;
 - f) selecting B lymphocytes from the isolated spleen material;
 - g) fusing the selected B lymphocytes with the active myeloma cells to form hybridoma cells;
 - h) culturing the hybridoma cells under suitable conditions for expressing antibodies bound to the antibody binding proteins on the surface of the hybridoma cell;
 - i) exposing the expressing hybridoma cells to the specific antigen, wherein the specific antigen is adapted to fluoresce; and

4121-126

- j) selecting a fluorescing hybridoma cell complexed to the specific antigen thereby providing an effective hybridoma cell for expressing the monoclonal antibody.
22. (Previously presented) The method according to claim 21, wherein the nucleotide sequence encoding the antibody binding protein is selected from the group consisting of SEQ ID NO: 1 from nucleotide 737-1420, SEQ ID NO: 3 from nucleotide 682-1782, and SEQ ID NO: 5 from nucleotide 682-1431.
23. (Previously presented) The method according to claim 21, wherein the antibody binding protein comprises an amino acid sequence selected from the group consisting of SEQ ID NO: 2, SEQ ID NO 4 and SEQ ID NO:6.
24. (Previously presented) The method according to claim 21, wherein step (j) comprises sorting by fluorescence-activated cell sorting FACS.

THE REMAINDER OF THIS PAGE IS INTENTIONALLY LEFT BLANK